ANNALS OF EPIDEMIOLOGY

VOLUME 9

SPECIAL REPORT

1 **The Emerging Importance of Genetics in Epidemiologic Research. I. Basic Concepts in Human Genetics and Laboratory Technology**
Darrell L. Ellsworth, PhD, and Terri A. Manolio, MD, MHS

EDITORIAL

17 **More Research is Needed**
George Maldonado, PhD, and Charles Poole, ScD

ORIGINAL REPORTS

19 **Establishing Research Priorities in Etiologic Epidemiology**
Nancy Kreiger, MPH, PhD, Margaret Sloan, BA, and Jeanie Lacroix, MPA

25 **Seven-Year Changes in Physical Fitness, Physical Activity, and Lipid Profile in the CARDIA Study**
Barbara Sternfeld, PhD, Stephen Sidney, MD, MPH, David R. Jacobs, Jr., PhD, Marianne C. Sadler, MPH, William L. Haskell, PhD, and Pamela J. Schreiner, PhD

34 **Positive Association between Resting Pulse and Cancer Incidence in Current and Former Smokers**
James R. Cerhan, MD, PhD, Marian Pavuk, MD, and Robert B. Wallace, MD

45 **Depressive Symptoms and Mortality in Older Mexican Americans**
Sandra A. Black, PhD, and Kyriakos S. Markides, PhD

53 **Who Participates in Population Based Studies of Visual Impairment? The Salisbury Eye Evaluation Project Experience**
Beatriz Muñoz, MSc, Sheila West, PhD, Gary S. Rubin, PhD, Oliver D. Schein, MD, Linda P. Fried, MD, Karen Bandeen-Roche, PhD, and SEE PROJECT TEAM

STUDY METHODS & DESIGN

60 **Cancer Occurrence in the Elderly: Agreement between Three Major Data Sources**
Andreas Stang, MD, MPH, Robert J. Glynn, ScD, Peter H. Gann, MD, ScD, James O. Taylor, MD, and Charles H. Hennekens, MD, DRPH

68 LETTERS TO THE EDITOR

SPECIAL REPORT

75 **The Emerging Importance of Genetics in Epidemiologic Research II. Issues in Study Design and Gene Mapping**
Darrell L. Ellsworth, PhD, and Terri A. Manolio, MD, MHS

EDITORIAL

91 **Age-Adjusted Death Rates: A Hazard to Epidemiology?**
Lewis H. Kuller, MD, DrPH

(continued)

© 1999 Elsevier Science Inc. All rights reserved.
655 Avenue of the Americas, New York, NY 10010

1047–2797/99/$–see front matter

ORIGINAL REPORTS

93 **Age-Adjusted Death Rates: Consequences of the Year 2000 Standard**
Paul D. Sorlie, PhD, Thomas J. Thom, BA, Terri Manolio, MD, Harry M. Rosenberg, PhD, Robert N. Anderson, PhD, and Gregory L. Burke, MD

101 **Relationship of Blood Pressure to Cardiovascular Death: The Effects of Pulse Pressure in the Elderly**
Mei-Ling T. Lee, PhD, Bernard A. Rosner, PhD, and Scott T. Weiss, MD

108 **Cigarette Smoking, Alcohol Use, and Physical Activity in Relation to Serum Leptin Levels in a Multiethnic Population: The Miami Community Health Study**
Richard P. Donahue, PhD, MPH, Paul Zimmet, MD, Judy A. Bean, PhD, Maximilian Decourten, MD, Rosemary A. DeCarlo Donahue, PhD, RN, Gregory Collier, PhD, Ronald B. Goldberg, MD, Ronald J. Prineas, MD, PhD, Jay Skyler, MD, and Neil Schneiderman, PhD

114 **Mentholated Cigarette Smoking and Lung-Cancer Risk**
Catherine L. Carpenter, PhD, Murray E. Jarvik, MD, PhD, Hal Morgenstern, PhD, William J. McCarthy, PhD, and Stephanie J. London, MD, DrPH

121 **Relationship of Coffee Consumption with Serum Lipids and Lipoproteins in Japanese Men**
Yoshihiro Miyake, MD, Suminori Kono, MD, PhD, MSc, Masato Nishiwaki, MD, Hiroaki Hamada, MD, Hiroshi Nishikawa, MD, Hiroko Koga, MD, and Shinsaku Ogawa, MD

127 **Association between Exercise and HIV Disease Progression in a Cohort of Homosexual Men**
Tajammal Mustafa, PhD, Francisco S. Sy, MD, DrPH, Carol A. Macera, PhD, Shirley J. Thompson, PhD, Kirby L. Jackson, BA, Anbesaw Selassie, DrPH, and Laura L. Dean, MS

STUDY METHODS & DESIGN

132 **Simulation Study of the Effects of Excluding Early Deaths on Risk Factor-Mortality Analyses in the Presence of Confounding Due to Occult Disease: The Example of Body Mass Index**
David B. Allison, PhD, Moonseong Heo, PhD, Dana W. Flanders, PhD, Myles S. Faith, PhD, Kenneth M. Carpenter, PhD, and David F. Williamson, PhD

BOOK REVIEWS

143 **Ethnoepidemiology of Cancer**
Japanese Cancer Association
Gann Monograph on Cancer Research No. 44
John W. Waterbor, MD, DrPH

144 **Epidemiology and Prevention of Cardiovascular Diseases—A Global Challenge**
Aaron R. Folsom, MD

145 **Announcement**

EDITORIAL

147 **How Do We Evaluate and Utilize Data on Ethnic Differences?**
Barbara V. Howard, PhD

ORIGINAL REPORTS

149 **The Relationship Between Lipids/Lipoproteins and Atherosclerosis in African Americans and Whites: The Atherosclerosis Risk in Communities Study**
Paul D. Sorlie, PhD, A. Richey Sharrett, MD, DrPH, Wolfgang Patsch, MD, Pamela J. Schreiner, PhD, Clarence E. Davis, PhD, Gerardo Heiss, MD, and Richard Hutchinson, MD

(*continued*)

159 **Relationship of Serum and Dietary Magnesium to Incident Hypertension: The Atherosclerosis Risk in Communities (ARIC) Study**
James M. Peacock, MPH, Aaron R. Folsom, MD, Donna K. Arnett, PhD, John H. Eckfeldt, MD, PhD, and Moyses Szklo, MD, DrPH

166 **High Levels of Plasma C-Reactive Protein and Future Risk of Age-Related Cataract**
Debra A. Schaumberg, OD, MPH, Paul M. Ridker, MD, MPH, Robert J. Glynn, PhD, William G. Christen, ScD, M. Reza Dana, MD, MPH, and Charles H. Hennekens, MD, DrPH

172 **A Prospective Study of Alcohol Consumption and the Risk of Age-Related Macular Degeneration**
Umed A. Ajani, MBBS, MPH, William G. Christen, ScD, Joann E. Manson, MD, DrPH, Robert J. Glynn, ScD, Debra Schaumberg, OD, Julie E. Buring, ScD, and Charles H. Hennekens, MD, DrPH

178 **Measurement Characteristics of the Women's Health Initiative Food Frequency Questionnaire**
Ruth E. Patterson, PhD, RD, Alan R. Kristal, DrPH, Lesley Fels Tinker, PhD, Rachel A. Carter, MS, Mary Pat Bolton, MA, RD, and Tanya Agurs-Collins, PhD, RD

188 **Participation Rates in a Case-Control Study: The Impact of Age, Race, and Race of Interviewer**
Patricia G. Moorman, PhD, Beth Newman, PhD, Robert C. Millikan, DVM, PhD, Chiu-Kit J. Tse, MSPH, and Dale P. Sandler, PhD

196 **1996 Remington Lecture: Modeling Multivariate Longitudinal Data That Are Incomplete**
Mark A. Espeland, PhD, Timothy E. Craven, MSPH, Michael E. Miller, PhD, and Ralph D'Agostino, Jr., PhD

BOOK REVIEW

206 **Epidemiology Kept Simple. An Introduction to Classic and Modern Epidemiology**
Dimitrios Trichopoulos, MD

SPECIAL REPORT

207 **The Emerging Importance of Genetics in Epidemiologic Research III. Bioinformatics and Statistical Genetic Methods**
Darrell L. Ellsworth, PhD, and Teri A. Manolio, MD, MHS

ORIGINAL REPORTS

225 **Methods and Prevalence of ADL Limitations in Hispanic and Non-Hispanic White Subjects in Rural Colorado: The San Luis Valley Health and Aging Study**
Richard F. Hamman, MD, DrPH, Christine L. Mulgrew, PhD, MPH, Judith Baxter, MA, Susan M. Shetterly, MS, Carolyn Swenson, MSN, FNP, and Nora E. Morgenstern, MD

236 **Cigarette Smoking Among Native and Foreign-Born African Americans**
Gary King, PhD, Anthony P. Polednak, PhD, Robert Bendel, PhD, and Deborah Hovey, MSW

245 **Blood Pressure and the *T174M* and *M235T* Polymorphisms of the Angiotensinogen Gene**
Tianhua Niu, ScD, Changzhong Chen, MD, Jianhua Yang, MD, Binyan Wang, MD, PhD, Zhaoxi Wang, MD, PhD, Nicholas Schork, PhD, Zhian Fang, MD, and Xiping Xu, MD, PhD

254 **Alcohol and Prostate Cancer in the NHANES I Epidemiologic Follow-Up Study**
Rosalind A. Breslow, PhD, MPH, Louise Wideroff, PhD, Barry I. Graubard, PhD, Diane Erwin, MA, Marsha E. Reichman, PhD, Regina G. Ziegler, PhD, MPH, and Rachel Ballard-Barbash, MD

(*continued*)

262 **The Effect of Comorbidity on Care Seeking for Back Problems in the United States**
Eric L. Hurwitz, DC, PhD, and Hal Morgenstern, PhD

BOOK REVIEWS

271 **Application of Biomarkers in Cancer Epidemiology**
Margaret Wrensch, PhD

274 **Pharmacoepidemiology. An Introduction, 3rd ed.**
C. Ineke Neutel, PhD, FACE

SPECIAL REPORT

277 **New Ethics Guidelines for Epidemiology: Background and Rationale**
Douglas L. Weed, MD, PhD, and Steven S. Coughlin, PhD

EDITORIAL

281 **Depression and Medical Illness**
Mary A. Whooley, MD

ORIGINAL REPORTS

283 **Comparison of Self-Reported and Physician-Reported Antidepressant Medication Use**
Michelle Cotterchio, MS, MPH, Nancy Kreiger, PhD, MPH, Gerarda Darlington, PhD, MSc, and Allan Steingart, MD, BSc

290 **Cigarette Smoking, Environmental Tobacco Smoke Exposure and Insulin Sensitivity: The Insulin Resistance Atherosclerosis Study**
Leora Henkin, MPH, MEd, Daniel Zaccaro, MS, Steven Haffner, MD, Andrew Karter, PhD, Marian Rewers, MD, PhD, Phyliss Sholinsky, MSPH, and Lynne Wagenknecht, DrPH

297 **Lung Function, Respiratory Symptoms, and Mortality: Results from the Busselton Health Study**
Matthew W. Knuiman, PhD, Alan L. James, MD, MBBS, Mark L. Divitini, BAppSc, Gerard Ryan, MBBS, Helen C. Bartholomew, GradDipComp, and A.W. Musk, MD, MBBS

307 **Distribution and Correlates of Elevated Total Homocyst(e)ine: The Stroke Prevention In Young Women Study**
Wayne H. Giles, MD, MS, Steven J. Kittner, MD, MPH, Janet B. Croft, PhD, Marcella A. Wozniak, MD, PhD, Robert J. Wityk, MD, Barney J. Stern, MD, Michael A. Sloan, MD, Thomas R. Price, MD, Robert J. McCarter, ScD, Richard F. Macko, MD, Constance J. Johnson, MD, Barbara R. Feeser, MPH, Christopher J. Earley, MD, PhD, David W. Buchholz, MD, and Paul D. Stolley, MD, MPH

314 **Validity and Reproducibility of a Food Frequency Interview in a Multi-Cultural Epidemiologic Study**
Elizabeth J. Mayer-Davis, PhD, Mara Z. Vitolins, DrPH, Suzan L. Carmichael, PhD, Sandra Hemphill, BS, Georgia Tsaroucha, MSPH, Julia Rushing, MStat, and Sarah Levin, MS

325 **Coffee Drinking and Serum Gamma-Glutamyltransferase: An Extended Study of Self-Defense Officials of Japan**
Satoshi Honjo, MD, Suminori Kono, MD, Michel P. Coleman, MD, Koichi Shinchi, MD, Yutaka Sakurai, MD, Isao Todoroki, MD, Takashi Umeda, MPhysED, Kazuo Wakabayashi, PhD, Koji Imanishi, MD, Hiroshi Nishikawa, MD, Shinsaku Ogawa, MD, Mitsuhiko Katsurada, MD, Katsuya Nakagawa, MD, and Nobuyuki Yoshizawa, MD

332 **Erratum**

(continued)

COMMENTARIES

335 **Alcohol and Mortality in Russia: Is it Different than Elsewhere?**
Martin Bobak, MD, PhD, and Michael Marmot, MD, PhD

339 **All the Evidence Points to Alcohol Being Implicated in the Recent Changes in Mortality in Russia**
Beverley Balkau, PhD

ORIGINAL REPORTS

341 **Alcohol Consumption and Disability Pension among Middle-Aged Men**
Nils-Ove Månsson, MD, PhD, Lennart Råstam, MD, PhD, Karl-Fredrik Eriksson, MD, PhD, and Bo Israelsson, MD, PhD

349 **Changing Conditions and Treatments in a Dynamic Cohort of Ambulatory HIV Patients: The HIV Outpatient Study (HOPS)**
Anne C. Moorman, BSN, MPH, Scott D. Holmberg, MD, MPH, Steven I. Marlowe, MD, Jennifer C. Von Bargen, BA, Bienvenido G. Yangco, MD, Frank J. Palella, MD, Douglas J. Ward, MD, Mark O. Loveless, MD, Jack Fuhrer, MD, Patrick Joseph, MD, William A. Alexander, MD, Diane J. Aschman, MBA, RPH, and THE HOPS INVESTIGATORS

358 **Serum Ascorbic Acid and Cardiovascular Disease Prevalence in U.S. Adults: The Third National Health and Nutrition Examination Survey (NHANES III)**
Joel A. Simon, MD, MPH, and Esther S. Hudes, PhD, MPH

366 **Work and Leisure Time Physical Activity and Mortality in Men and Women from a General Population Sample**
Joan P. Dorn, PhD, Frank J. Cerny, PhD, Leonard H. Epstein, PhD, John Naughton, MD, John E. Vena, PhD, Warren Winkelstein, Jr., MD, Enrique Schisterman, MA, and Maurizio Trevisan, MD

374 **Women, Employment Status, and Hypertension: Cross-Sectional and Prospective Findings from the Atherosclerosis Risk in Communities (ARIC) Study**
Kathryn M. Rose, PhD, Beth Newman, PhD, Herman A. Tyroler, MD, Moyses Szklo, MD, DrPH, Donna Arnett, PhD, and Narain Srivastava, MD

383 **Cancer Prevention among Urban Southwestern American Indian Women: Comparison to Selected Year 2000 National Health Objectives**
Betsy Risendal, PhD, Jill DeZapien, BA, Brenda Fowler, MS, Mary Papenfuss, MS, and Anna Giuliano, PhD

COMMENTARY

391 **Coffee, Alcohol, and the Liver**
Dan S. Sharp, MD, PhD, James E. Everhart, MD, MPH, and Neal L. Benowitz, MD

EDITORIAL

394 **It's Your Shot! Immunization by Basketball**
Michael Rich, MD, MPH

ORIGINAL REPORTS

397 **Prevalence and Correlates of Physical Activity Behaviors among Elementary Schoolchildren in Multiethnic, Low Income, Inner-City Neighborhoods in Montreal, Canada**
Jennifer O'Loughlin, PhD, Gilles Paradis, MD, MSc, Natalie Kishchuk, PhD, Tracie Barnett, MSc, and Lise Renaud, PhD

408 **Compliance to Multiple Interventions in a High Risk Population**
Mary B. Pettinger, MS, Myron A. Waclawiw, PhD, Kathryn B. Davis, PhD, Tracy Thomason, PharmD, Rekha Garg, MD, Beate Griffin, RN, and Debra A. Egan, MPH

(continued)

419 **An Evaluation of the Completeness of Tuberculosis Case Reporting Using Hospital Billing and Laboratory Data; Wisconsin, 1995**
Mary Jo Trepka, MD, MSPH, Tanya O. Beyer, BS, RM(AAM), Mary E. Proctor, PhD, MPH, and Jeffrey P. Davis, MD

424 **Overweight, but Not High Dietary Fat Intake, Increases Risk of Gastroesophageal Reflux Disease Hospitalization: The NHANES I Epidemiologic Followup Study**
Constance E. Ruhl, MD, MPH, and James E. Everhart, MD, MPH

BRIEF COMMUNICATION

436 **The Sydney Blood Bank Cohort: A Case-Control Study Using a Transfused HIV-1 Seronegative Group**
Larissa B. McIntyre, MPH, Andrew F. Geczy, DSc, Wayne B. Dyer, PhD, Jennifer C. Learmont, and John S. Sullivan, PhD

ABSTRACTS

441 **American College of Epidemiology Annual Meeting**
October 3–4, 1999
Bethesda, MD

EDITORIAL

461 **Rising Tides, Falling Fortunes**
George A. Kaplan, PhD, and David R. Williams, PhD

ORIGINAL REPORTS

464 **Evidence of Increasing Coronary Heart Disease Mortality Among Black Men of Lower Social Class**
Elizabeth Barnett, PhD, Donna L. Armstrong, PhD, and Michele L. Casper, PhD

472 **Racial Disparities in CHD Mortality from 1968–1992 in the State Economic Areas Surrounding the ARIC Study Communities**
Janice E. Williams, PhD, MPH, Mark Massing, MD, MPH, Wayne D. Rosamond, PhD, Paul D. Sorlie, PhD, and Herman A. Tyroler, MD

481 **Intra-Individual Variation and Estimates of Usual Physical Activity**
Sarah Levin, PhD, David R. Jacobs Jr., PhD, Barbara E. Ainsworth, PhD, Mark T. Richardson, PhD, and Arthur S. Leon, MD

489 **Effect of Body Weight Changes on Changes in Ambulatory and Standardized Non-Physician Blood Pressures Over Three Years**
Linda M. Gerber, PhD, Joseph E. Schwartz, PhD, Peter L. Schnall, MD, MPH, Richard B. Devereux, MD, Katherine Warren, BA, and Thomas G. Pickering, MD, DPhil

STUDY METHODS & DESIGN

498 **Designing a Community Study of Moderately to Severely Disabled Older Women: The Women's Health and Aging Study**
Judith D. Kasper, PhD, Sam Shapiro, DHL(hc), Jack M. Guralnik, MD, PhD, Karen J. Bandeen-Roche, PhD, and Linda P. Fried, MD, MPH

508 **Acknowledgement to 1999 Reviewers**

509 **Author Index to Volume 9**

514 **Subject Index to Volume 9**

Volume 9 Contents